



CONSERVATION AND  
ENVIRONMENTAL  
SERVICES



# RECYCLING AND SOLID WASTE PLANNING MANUAL

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## 1 - OVERVIEW

The State of California has mandated that at least 50% of the solid waste generated be diverted from landfills. Therefore, each applicant of a development, subdivision or major construction project (including new public facilities) is required to develop and submit a **Recycling and Solid Waste Plan** as a part of the approval process. The Plan must describe the steps the applicant will take to meet the local and State mandates and recycle the Designated Recyclable materials as defined in Chula Vista Municipal Code Chapter 8.25. Plans are subject to approval by the City Manager or his designee. **Designated Recyclables** include:

**Residential recyclables** – those specific recyclable materials from residential solid waste (single-family and multi-family) including but not limited to, aluminum, glass bottles and jars, plastic bottles, tin and bi-metal cans, newspapers, mixed paper (magazines, junk mail, telephone books, paperback books, and boxboard) cardboard, white goods and yard waste.

**Commercial recyclables** – designated recyclable materials from office and hospitality industries. Materials include but are not limited to, office paper, cardboard, glass bottles and jars, plastic bottles, aluminum, tin and bi-metal cans, and white goods.

**Industrial recyclables** – recyclable material from industrial, construction and demolition operations including, but not limited to asphalt, concrete, dirt, land-clearing brush, sand and rock.

### Items to be considered in your plan:

The following are items to be considered when designing your project and should be addressed in your Plan. You must include a narrative that thoroughly describes your project's waste reduction and recycling activities. If you have questions or need clarification, you may contact the City Conservation and Environmental Services Department at (619) 691-5122 or [conservation@ci.chula-vista.ca.us](mailto:conservation@ci.chula-vista.ca.us) or the City's web site [www.chulavistaca.gov](http://www.chulavistaca.gov). Submit your **Recycling and Solid Waste Management Plan** with your application for a discretionary permit to the Chula Vista Planning Department for approval. Include a short narrative about your plan implementation and operation within the "Notes" on your plans.



Identify the recycling and trash space allocated within your project, as this will dictate how well your occupants will be able to participate in the various City programs, how much they will recycle and how much they can save. Make sure your infrastructure planning allows your future occupants the ability to avail themselves of all recycling and solid waste services. Your plan must provide adequate space to properly store all the solid waste and recyclables generated on the site in approved containers between service days. The plan must also allocate space in a manner that provides occupants with the opportunity to divert all the Designated Recyclables generated at the site.

Your plan needs to describe how the recycling and solid waste infrastructure will be utilized by the occupants and maintained on an on-going basis, such as:

- ❑ Include solid waste and recycling requirements and information in your CC&Rs, employee/owner/tenant orientations, policy manuals, and lease agreements. Include the draft language for these items in your Plan.
- ❑ Show where residents will store containers during the week and where they will be placed on service day; where and how bulky items, Holiday trees and used motor oil will

be placed for collection.

- ❑ If contracting with a landscaper, your plan must demonstrate that you will require all yard waste to be diverted for reuse, either through on-site mulching, grasscycling, a permitted compost facility or for reuse at the landfill – not disposal. Your plan shall establish the requirement to obtain receipts from the contractor demonstrating that the material was recycled or composted. Those receipts shall be maintained for eighteen (18) months and be available to City staff for review upon two days notice during regular business hours.
- ❑ Color code containers and provide graphic signs that instruct occupants/customers to separate materials in the containers used to transport recyclables and trash to the outdoor enclosure.
- ❑ Place recycling containers next to all trash containers – (“twinning”).
- ❑ Review your operations at least annually. Contact the city for a free waste audit to improve business recycling productivity, reduce waste and keep your solid waste and recycling services cost-effective and up to date.

Small Quantity Generators (SQG – curbside service for residents and small businesses) can control their monthly costs by reducing their trash volume through weekly trash and recycling collection, bulky item collection, yard waste collection, used oil and oil filter collection, Holiday tree collection, and two annual landfill passes and two annual yard waste passes. (See service brochures for details on these programs.)

Large Quantity Generators (LQG - commercial, multi-family and industrial projects with central collection service) can control or reduce their costs by taking advantage of recycling savings. Restaurants and other hospitality facilities can obtain free food-beverage container collection service.

#### **Estimating Trash Service Capacity Needs for Central Bin Collection in Multi-family Complexes**

After estimating the required trash service – pair each trash bin with the required recycling service and design enclosures appropriately.

<b>Multi-family Complex</b>	
<b>Service Needs Table</b>	
# Bedrooms per unit	Cubic yards per unit per wk.
Studios-1Br.	0.33
1-2 Br.	0.36
2-4 Br.	0.40

**Calculation:**

# Of units in complex (example: 100, 3-bedroom units)	X # Of cubic yards per unit from Service Needs Table above	= Total cubic yards of service needed per week	Total cubic yards of service needed per week	÷ Product of bin size times days a week service (4 yd bin X 2 days)	= Number of trash enclosures required
100	X 0.4	= 40	40	÷ 8	= 5

#### **Logistical Considerations:**

- Weekly trash and food/beverage container recycling collection is the minimum requirement. All multi-family, commercial, industrial and public facility properties may subscribe to service that is more frequent.

- Small Quantity Generators (SQG – curbside collection) place two or more 96-gallon or smaller trash and recycling carts at the curb for weekly collection on their assigned collection day. These customers also receive yard waste, bulky-item, used oil and oil filter collection services. Therefore there must be curbside space for these containers with one and a half (1 1/2) feet, approximately eighteen inches, between each cart and any stationary objects (e.g. parked cars), on service day.
- All properties must have adequate space to accommodate bin and/or cart storage for waste and recyclable materials separately and out of public view in-between collection days. The City strongly recommends that commercial properties plan for no more than three collections per week and that multi-family properties plan for no more than twice per week service. For details on enclosure design requirements see Enclosure and Chute Design Requirements – Central Collection.
- Twinning – design so that recycling containers are placed with each trash receptacle.
- On a mixed-use site, the Recycling and Solid Waste Management Plan generally follows the space allocation criteria for each use category (i.e. single-family, multi-family, commercial, curbside collection, or central collection).
- Public facilities shall implement the service category that best fits the facility use, always twinning recycling and trash containers for ease, convenience and to minimize the contamination of recyclable materials.
- Offices typically generate a waste stream with 40% to 60% mixed paper. Mixed paper includes: office paper, cardboard, junk mail, magazines, telephone books, box board, etc. Carbon paper or single use items such as tissues and paper towels are not recyclable and must be composted or placed in the trash.
- If your business will consistently generate a large amount of wooden pallets, food waste, five-gallon plastic buckets or another potentially recyclable item you may contact the City Conservation and Environmental Services Department or Pacific Waste services for recycling market assistance.
- Design in a manner that facilitates the following priorities: reduce, reuse, recycle, compost and dispose.

Examples:

- ☐ Residential kitchens: Ample space for trash and recycling bins under sinks or in cabinetry for separation of Designated Recyclables.
- ☐ Show where residents will store carts during the week on their property and where they will be placed at the curb on collection day.
- ☐ Outdoor dining, lounge areas and public facilities: Plan for trash and Designated Recyclables collection containers side-by-side (twinning).
- ☐ Copy and print rooms: Allow space for both trash and paper recycling containers side by side to encourage diversion.
- ☐ Bars and dining areas: Incorporate space for recycling of all food and beverage containers, specifically, along with other Designated Recyclables as appropriate.
- ☐ Recreation Centers and Community Pools: Plan for trash and Designated Recyclables collection containers side-by-side (twinning.)
- Residential automated collection vehicles collect materials from the right side of the vehicle only.
- Commercial collection vehicles collect materials at the front of the vehicle.

- If the collection truck must enter your property to service bins, the truck must be able to circulate the parking area without backing up. Collection vehicles have a turning radius of 37.1 ft., are approximately 35 feet long (curbside collection bucket adds 7 feet to the length for a total of 42 feet) and 8 feet wide.

#### **To Complete your Plan:**

- Review the project design sheet that applies to your project: residential, commercial or industrial.
- Write a thorough description of how you will implement your ***Recycling and Solid Waste Management Plan*** through each phase of the project: pre-construction, construction, and operation/occupancy.
- Submit your ***Recycling and Solid Waste Management Plan*** with your project application to the Chula Vista Planning Department for approval. Include a short narrative about your plan implementation and operation within your "Notes" on your building plans.

#### **CONTACTS:**

- For service day information or other collection clarification, contact Pacific Waste Services at (619) 421-9400. Pacific's representative will be available to review plans for accessibility, equipment types, do site visits and arrange for recycling services.



- Contact the City's Conservation and Environmental Services Department for a list of construction and demolition material recycling processors and/or service brochures for program details. Or check the City's web site at [www.chulavistaca.gov](http://www.chulavistaca.gov). Staff is also available to assist you with your recycling program and your solid waste management plan (619) 691-5122.

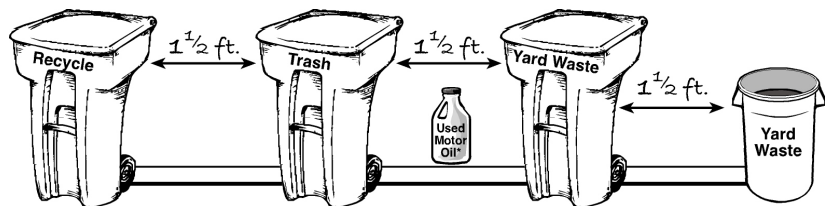
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**2 - RECYCLING AND SOLID WASTE STANDARDS FOR CURBSIDE OR DOOR-TO-DOOR SERVICE FOR SMALL QUANTITY GENERATORS**

Small Quantity Generators receive weekly recyclables, yard waste and trash collection, bulky items pick up, used motor oil and oil filter collection services. Include in your site plan defined location(s) where the trash, recycling and yard waste carts will be stored in-between service days, out of public view, and where they will be placed at the curb for collection on service days.

All residential dwellings with curbside or door-to-door collection must be designed to allow for weekly placement and collection of trash, yard waste and recycling containers at the curb.

There must be space at the curb for a minimum of three containers (trash, recyclables and green waste), approximately eighteen inches apart, for each dwelling unit. The City must pre-approve alley collection.



The automated collection vehicle services the containers from the right side (curbside) of the vehicle.

Condominiums with no private landscaping can provide space for two carts (trash and recycling, eliminating yard waste) per unit. However, condominiums must have an enclosure on the property, sufficient for yard waste bins, to serve the common areas.

If contracting with a landscaper, your plan must demonstrate that you will require that all yard waste be diverted for reuse, either through on-site mulching, grasscycling, a permitted compost facility or for reuse at the landfill – not disposal. Your plan shall establish the requirement to obtain receipts from the contractor demonstrating that the material was recycled or composted. Those receipts shall be maintained for eighteen (18) months and be available to City staff for review upon two days notice during regular business hours.

See the Single-family Residential Recycling Guide and Trash Service Brochure for detailed information on all available services for single-family residential customers.

**CONTACTS:**

- For service day information or other collection clarification, contact Pacific Waste Services at (619) 421-9400. Pacific's representative will be available to review plans for accessibility, equipment types, do site visits and arrange for recycling services.
- The City's Conservation and Environmental Services Department may be reached at (619) 691-5122 or [conservation@ci.chula-vista.ca.us](mailto:conservation@ci.chula-vista.ca.us)

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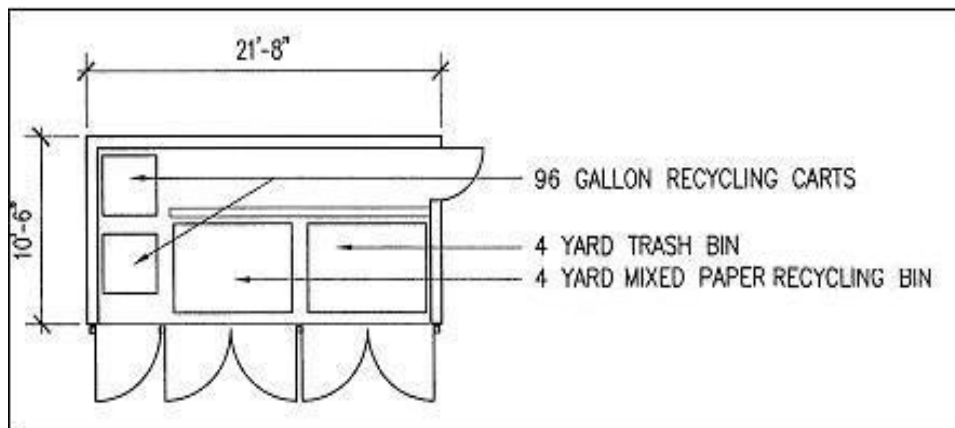
### 3 - RECYCLING AND SOLID WASTE STANDARDS FOR MULTI-FAMILY COMPLEXES CENTRAL COLLECTION - BIN SERVICE

The Residential Waste Stream typically includes the following recyclables: 40% paper, 10% metal, glass and plastic containers and 30% yard waste (apartments/condos usually generate only 7% to 15% yard waste from common areas).

Residential services include recyclables, yard waste and trash collection and bulky item pick up. Review the service brochures for details on each of these services and how to prepare materials for collection in these programs.

#### Multi-family Housing with Central Collection

- Trash and mixed paper recycling bins and rigid container recycling carts must be in the same enclosure(s) and must allow access without having to move other containers out of the way.



**SAMPLE ONLY**

- All bins should be placed in the enclosure out of public view. If bins are placed front-to-front, leave at least 3 feet between bins for access. The design must provide easy access for the residents and allow the hauler access to service bins and/or carts without moving other bins/carts out of the way.
- Design for approximately, one, 4-cubic yard bin for trash service for every 8-12 units depending on the number of bedrooms per unit. See estimating formula in Section 1. Then add the required recycling services for each enclosure. The City strongly recommends that you do not assume more than twice per week collection service to limit the number of collection truck trips on your property.
- Include an enclosure of appropriate size for centralized collection of yard waste. If contracting with a landscaper, make certain to include in your contract the requirement that all yard waste must be diverted for reuse, either through on-site mulching, grasscycling, a permitted compost facility or for reuse at the landfill – not disposal. Include the requirement to receive copies of receipts to verify diversion.
- All projects with six or more units shall provide additional space that is sufficient for the free monthly bulky collection (mattresses, appliances, furniture), free annual Holiday Tree recycling and other periodic or seasonal events. Approximately 400 square feet is required for a complex of 40 units or more.



- If the collection truck must enter your property to service bins, the truck must be able to circulate the parking area without backing up. Collection vehicles have a turning radius of 37.1 ft. are approximately 35 feet long (curbside collection bucket adds 7 feet to the length for a total of 42 feet) and 8 feet wide.

See the Multi-family service brochure for more information on residents' services.

### **Trash and Recycling Chutes**

- If a facility plans to provide chutes, the City may require that you provide three chutes adjacent to one another in each disposal and recycling area. One chute identified for mixed paper recyclables, one chute identified for bottles and cans, and one chute identified for trash. Other options may be proposed by first consulting the City's Conservation Coordinator.
- The driver must be able to service bins without moving other bins in the chute rooms.
- It is strongly recommended that you provide an enclosure(s) on site for corrugated cardboard as boxes may clog your trash and recycling chutes. If enough space is provided, the enclosure can also be used for free bulky collection, Holiday tree collection and other periodic or seasonal services.

### **CONTACTS:**

- For service day information or other collection clarification, contact Pacific Waste Services at (619) 421-9400. Pacific's representative will be available to review plans for accessibility, equipment types, do site visits and arrange for recycling services.
- The City's Conservation and Environmental Services Department may be reached at (619) 691-5122 or [conservation@ci.chula-vista.ca.us](mailto:conservation@ci.chula-vista.ca.us)

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#### **4 - RECYCLING AND SOLID WASTE STANDARDS FOR COMMERCIAL AND INDUSTRIAL BUSINESSES- CENTRAL COLLECTION – BIN SERVICE**

The Commercial Waste Stream varies by the type of business, but typically includes the following recyclables: 40-60% paper, 5% metal, glass and plastic containers (10%-15% for food service businesses) and 15% yard waste (or pre-consumer food waste that can be recycled with yard waste).

- Commercial and industrial properties must have enclosure space and numbers of bins or carts adequate to divert the Designated Recyclables generated on their property.
- Trash and recycling bins or carts must be placed in the same enclosures.
- Yard waste must be separate. Plan for adequate container volume and service intervals to divert yard waste (tree, brush or grass trimmings) generated at your business. If contracting with a landscaper, your plan must demonstrate that you will require that all yard waste be diverted for reuse, either through on-site mulching, grasscycling, a permitted compost facility or for reuse at the landfill – not disposal. Your plan shall establish the requirement to obtain receipts from the contractor demonstrating that the material was recycled or composted. Those receipts shall be maintained for eighteen (18) months and be available to City staff for review upon two-days notice during regular business hours.
- Each business should allocate space, in each enclosure, for at least one mixed paper bin and one rigid container cart along with their trash disposal service requirements.
- The City may require that the enclosure include additional space and access for other ancillary services (i.e. restaurants-grease collection, auto repair-scrap metal collection, etc., where applicable).

#### **COMPACTORS:**

- Commercial compactors are not recommended for trash service. Compactors must be pre-approved by the City's franchise hauler, Pacific Waste Services and the City Conservation and Environmental Services Department. (See Municipal Code § 8.24.080.B)
- A business that is using a compactor must still divert Designated Recyclables: paper, cardboard, food and beverage containers, yard waste, clean lumber and metals, etc. (See Municipal Code Chapter 8.25).

#### **CONTACTS:**

- For service day information or other collection clarification, contact Pacific Waste Services at (619) 421-9400. Pacific's representative will be available to review plans for accessibility, equipment types, do site visits and arrange for recycling services.
- The City's Conservation and Environmental Services Department may be reached at (619) 691-5122 or [conservation@ci.chula-vista.ca.us](mailto:conservation@ci.chula-vista.ca.us)

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## 5 - RECYCLING AND SOLID WASTE ENCLOSURE STANDARDS

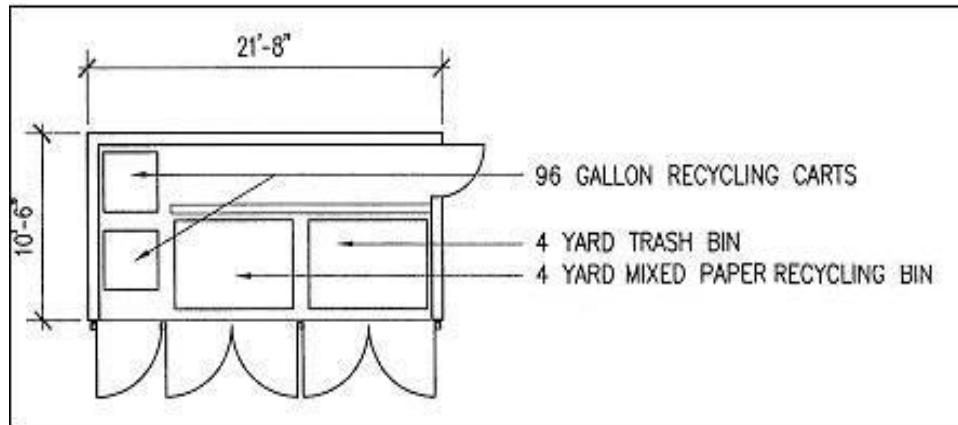
The following minimum bin and cart dimensions are to be used when designing your enclosures.

<b>Bin Dimensions</b> (Allow 2 inches per bin dimension for access/maneuverability)	<b>Height</b>	<b>Depth</b>	<b>Width</b>
4 cubic yards (min. size to plan for trash & mixed paper)	66"	56"	81"
5 cubic yards (larger bins provided at City/hauler discretion)	66"	68"	81"
6 cubic yards (no wheels direct truck access)	72"	70"	81"
<b>Cart Dimensions</b> (Allow 1 inch per cart dimension for access/maneuverability. Dimensions are the maximum size.)	<b>Height</b>	<b>Depth</b>	<b>Width</b>
96 Gallon Carts (for Designated Recyclables, yard waste and trash)	44	36	32"

- Trash enclosures should be as far away from storm drain inlets as possible.
- All trash enclosures shall be paved with an impervious surface, designed not to allow run-on from adjoining areas, and shall be screened or walled to prevent off-site transport of trash.
- Wheel stops for bins and carts must be configured such that they provide 8-inch bin clearance from all three walls, 6 inches high is recommended.
- Doors must be anchored to appropriately sized steel posts (min. 2 inches by 3/16 gauge steel) set independently from walls.
- Cane bolts, dropped into sleeved holes in the concrete, to hold doors in both the open and closed position are required.
- Enclosures and/or containers within the enclosure, must have covers designed to reduce pests, illegal disposal and exclude rain.
- The flat reinforced concrete pad (approximately 24 feet X 12 feet, no decorative stamping or brickwork/cobblestones) in front of the enclosure should extend beyond the enclosure to provide sufficient space to allow:
  - ☒ The truck to stop in front of the enclosure with the front wheels resting on the concrete pad:
  - ☒ The bins to be rolled out of the enclosure and;
  - ☒ The bin to be positioned in front of the truck without moving the truck.
- There must be enough enclosures in the project to provide convenient and sufficient capacity to handle the volume of recyclables and waste generated between collections.
- Each enclosure must be designed and sized appropriately to accommodate bins and/or carts for the Designated Recyclables and solid waste generated on the property. All properties are required to allocate space to recycle all Designated Recyclables.
- Enclosures must be designed so that trash, paper, rigid containers, and yard waste containers may be accessed by the generator and serviced by the collection company without moving other bins or

carts. Recommendation: A separate pedestrian access door will save you large door repairs, prevent illegal disposal and is safer for the generator to use.

- The City may require that the enclosure include additional space and access for other ancillary services i.e. restaurants - grease collection, auto repair - scrap metal collection, etc. where applicable.
- Each enclosure must be located on the site plan and the bin and carts placement inside the enclosure clearly identified – R= mixed paper recycling; C=container recycling; Y=yard waste recycling; W=waste or trash.



Sample Only

#### Enclosure Location

- Reduce or eliminate the need for collection trucks to drive onto private property whenever possible.
- If you place the enclosure within 25' of the public thoroughfare, the hauler will roll bins and carts to the street for service at no additional charge.
- The hauler is authorized to add a service surcharge if they cannot drive to within 25' of the enclosure.
- If the collection truck must enter your property to service bins the truck must be able to circulate the parking area without backing up. Trucks are approximately 35 – 42 feet long, 8 feet wide and have a turning radius of 37.1 feet.
- Do not put speed bumps, stamped concrete, cobblestones or other obstacles in front of enclosures that would impede the access of the vehicle or bin rollout. Truck and bins must be on a flat surface when being serviced.
- Whenever possible enclosures for apartments and condominiums should be geographically distributed in a manner that is convenient for residents.
- Enclosures in commercial settings and public facilities should consider proximity to service doors, traffic flow, delivery patterns, etc.

#### Trash and Recycling Chutes

- If a facility plans to provide chutes, the City may require that you provide three chutes adjacent to one another in each disposal and recycling area. One chute identified for mixed paper recyclables, one chute identified for bottles and cans, and one chute identified for trash. Other options may be proposed by first consulting the City's Conservation Coordinator.
- The driver must be able to service bins without moving other bins in the chute rooms.

- It is strongly recommended that you provide an enclosure(s) on site for corrugated cardboard as boxes may clog your trash and recycling chutes. If enough space is provided, the enclosure can also be used for free bulky collection, Holiday tree collection and other periodic or seasonal services.

**CONTACTS:**

- For service day information or other collection clarification, contact Pacific Waste Services at (619) 421-9400. Pacific's representative is available to review plans for accessibility, equipment approval, do a site visit and arrange for recycling services during all phases, construction through occupancy.
- The City's Conservation and Environmental Services Department may be reached at (619) 691-5122 or [conservation@ci.chula-vista.ca.us](mailto:conservation@ci.chula-vista.ca.us).

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